ABSTRACT OF THE DISCLOSURE

The embodiments of the present invention provide a method for comparing file tree descriptions and generating a sequenced log of changes that transform an old file tree to a new file tree. According to one embodiment, the inputs to this comparator are two tree-structured descriptions called file tree indices, and the outputs are a sequence of file tree operations that can transform the old tree to the current tree. According to another embodiment, the comparator has two top level steps, where at step one it recursively goes through the old file tree index and compares each folder along with its children with that of the corresponding file tree generating a raw operation log, and at step two after the recursion is done, the comparator processes the raw operation log and optimizes certain sets of operations by transforming them into single operations.